U.S. Department of Transportation
Federal Aviation Administration

Advisory Circular

Subject: ELIGIBILITY AND EVALUATION OF U.S. MILITARY SURPLUS FLIGHT SAFETY CRITICAL AIRCRAFT PARTS, ENGINES, AND PROPELLERS

Date: 2/25/00
Initiated By: AFS-300

AC No: 20-142
Change:

1. PURPOSE. This advisory circular (AC) provides information and guidance for use in evaluating and determining the eligibility of U.S. military surplus flight safety critical aircraft parts (FSCAP), engines, and propellers for installation on Federal Aviation Administration (FAA) type-certificated products. This AC is applicable to all U.S. military surplus FSCAP, engines, and propellers, irrespective of when and by what process these products or parts became available. In the absence of FSCAP classification of military surplus parts by the Department of Defense (DOD), such parts should be identified and classified as FSCAP using the guidance contained in this AC. For information and guidance on determining the eligibility of parts other than FSCAP, refer to AC 20-62, Eligibility, Quality, and Identification of Aeronautical Replacement Parts. Like all AC material, this AC is not mandatory and does not constitute a regulation. It is issued for guidance purposes and to outline one method of compliance with the rules. In lieu of following the method(s) prescribed herein without deviation, a person may elect to follow an alternative method, provided the FAA finds the alternative method to be an acceptable means of complying with the applicable requirements of Title 14 of the Code of Federal Regulations (14 CFR).

2. RELATED 14 CFR PARTS.

a. Part 1, Definitions and Abbreviations.

b. Part 21, Certification Procedures for Products and Parts.

c. Part 23, Airworthiness Standards: Normal, Utility, Acrobatic, and Commuter Category Airplanes.

d. Part 25, Airworthiness Standards: Transport Category Airplanes.

e. Part 27, Airworthiness Standards: Normal Category Rotorcraft.

f. Part 29, Airworthiness Standards: Transport Category Rotorcraft.

g. Part 33, Airworthiness Standards: Aircraft Engines.

h. Part 35, Airworthiness Standards: Propellers.

i. Part 39, Airworthiness Directives.

j. Part 43, Maintenance, Preventive Maintenance, Rebuilding, and Alteration.

k. Part 45, Identification and Registration Marking.

1. Part 9 1, General Operating and Flight Rules.

3. DEFINITIONS. The following terms have the meaning listed when used in this AC:

a. Critical Characteristic. Any feature throughout the life cycle of a FSCAP which, if nonconforming, missing, or degraded, could cause a catastrophic failure resulting in loss or serious damage to the aircraft or an uncommanded engine shutdown resulting in an unsafe condition. A characteristic can be critical in terms of a dimension, tolerance, finish, or material; an assembly, manufacturing, or inspection process; or an operational, field maintenance, or depot overhaul requirement.

(1) A manufacturing critical characteristic is produced during the manufacturing process.

(2) An installation critical characteristic is critical in terms of assembly or installation (e.g., torque).

b. DoD CAGE Code. The DoD Commercial and Government Entity (CAGE) code identifies the manufacturer of the part or product produced under government contract.

c. Dual Use Product/Part. Any product or part manufactured for civil application by a Production Approval Holder (PAH) authorized by the FAA which is also procured under a U.S. military contract. The product or part has the identical part number and configuration as its civil counterpart; it was manufactured using the same FAA-approved design, materials, and manufacturing processes. These could also include any product (or part thereof) originally produced for the military which currently holds a normal, utility, acrobatic, or transport type certificate (TC) issued under section 2 1.27.

d. Flight Safety Critical Aircraft Part (FSCAP). Any part, assembly, or installation containing a critical characteristic whose failure, malfunction or absence could cause a catastrophic failure resulting in loss or serious damage to the aircraft or an uncommanded engine shutdown resulting in an unsafe condition.

e. Military Surplus Product/Part. A product or part that has been originally released as surplus by the U.S. military, even if subsequently resold by a manufacturer, owner/operator, repair facility, or any other parts supplier.

f. Military Unique FSCAP. Any FSCAP specifically and uniquely designed and manufactured for the U.S. military, for which there is no corresponding FAA-approved type design or PAH engine, propeller or part produced for civil application. “Breakout” products or

parts, produced specifically for military use by a manufacturer other than an FAA PAH using military-provided designs/drawings and specifications, are also considered military unique.

g. Part Out. To remove a part from, or disassemble, an aircraft, engine, propeller, or assembly of parts.

4. RELATED READING MATERIAL.

a. Copies of the current edition of FAA Order 8300.10, Airworthiness Inspector's Handbook, may be purchased by check or money order payable to the Superintendent of Documents, PO Box 37 1954, Pittsburgh, PA 15250-7954.

b. Copies of current editions of the following documents may be obtained free of charge from the U.S. Department of Transportation, Subsequent Distribution Office, Ardmore East Business Center, 3341 Q 75th Avenue, Landover, MD 20785:

(1) FAA Order 8 110.4, Type Certification Process.

(2) FAA Order 8 110.42, Parts Manufacturer Approval Procedures.

(3) FAA Order 8 130.2, Airworthiness Certification of Aircraft and Related Products.

(4) FAA Order 8 130.21, Procedures for Completion and Use of FAA Form 8 130-3, Airworthiness Approval Tag.

(5) AC 20-62, Eligibility, Quality, and Identification of Aeronautical Replacement Parts.

(6) AC 20-96, Surplus Military Aircraft: A Briefing for Prospective Buyers.

(7) AC 21-13, Standard Airworthiness Certification of Surplus Military Aircraft and Aircraft Built from Spare and Surplus Parts.

(8) AC 2 I-23, Airworthiness Certification of Civil Aircraft Engines, Propellers, and Related Products.

(9) AC 2 l-29, Detecting and Reporting Suspected Unapproved Parts.

5. BACKGROUND.

a. The Federal Property and Administrative Services Act of 1949 (Public Law 81-152), as amended, requires the DoD to dispose of its surplus property. However, DoD is prevented from destroying property with economic value. Consequently, since the end of World War II various U.S. manufactured, DoD surplus military aircraft of the U.S. Armed Forces, and their parts, have been available for sale to or within the civil sector. Depending on the aircraft type and/or whether or not these surplus military products have had civilian counterpart models for which an FAA type certificate had been issued, such aircraft may have eligibility for either "standard' airworthiness certification under section 21.183(d), or "special" airworthiness certification under

section 2 1.185. With the "downsizing" of military requirements, increasing quantities of surplus DoD aviation products and their parts have become available for civil purchase.

b. In 1993 and 1994, various concerns regarding military surplus aircraft parts, specifically those parts designated by the proponent military service as FSCAP, entering into the civil market place led to the forming of a joint DoD and FAA FSCAP Process Action Team (PAT). This team, representing the Defense Logistics Agency, the Departments of the Army, Navy and Air Force, and the FAA, produced recommendations related to the identification, disposition and control of FSCAP. The DoD and the FAA accepted the PAT recommendations and jointly signed the implementation plan memorandum in 1995. This AC is part of the FSCAP PAT implementation plan and provides guidance that is pertinent to the aviation community regarding the potential installation of military surplus FSCAP on FAA type-certificated products.

6. DISCUSSION.

a. Any military surplus FSCAP may have the potential to be considered for approval to be installed on an aircraft which holds a special or standard airworthiness certificate.

b. While many military parts may appear to be the same as their FAA-approved civil counterparts, they are not automatically FAA-approved for installation, Typically, the procuring military service specifies requirements for the design, production, and acquisition of its parts, which may not meet the requirements of 14 CFR; however, certain parts procured by DoD also have the potential to be approved for civil use. In fact, certain military unique FSCAP are currently part of FAA-certificated, restricted category military surplus products. These military unique parts sometimes have no replacement source other than the military surplus stocks originally procured solely for U.S. Armed Forces use.

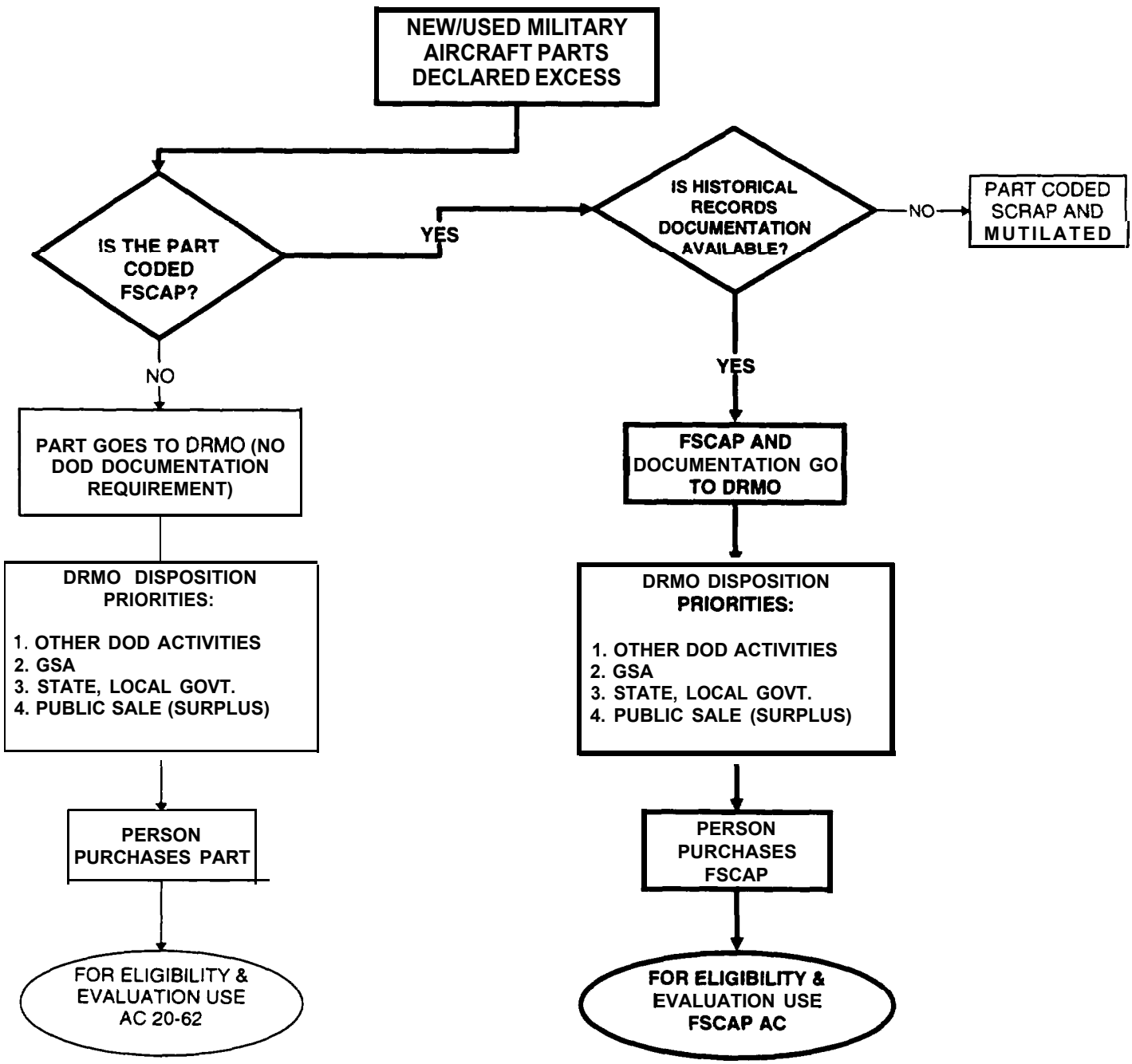
c. DoD makes no representation as to a part's eligibility for installation on FAA type-certificated products. Therefore, prior to installing the part on a type-certificated product, the receiving person, organization, or installer must determine that the part is eligible for installation and is airworthy. Failure to comply with FAA requirements can subject the owner and/or installer to enforcement actions. Since the FSCAP may not meet FAA type design and/or may have been operated outside the limitations specified by 14 CFR, additional inspections and/or FAA approval may be needed to determine the part's condition for safe operation or eligibility for installation on civil aircraft.

d. In order to maintain the airworthiness of any aircraft, parts used to maintain the aircraft must meet that aircraft's applicable airworthiness requirements. Section 43.13 requires the installer of a part on an FAA type-certificated product to ensure that the condition of the product is at least equal to that product's original or properly altered condition.

e. There are certain unique design considerations and FAA certification requirements for engines and propellers. Therefore, the eligibility and evaluation processes for military surplus engines, propellers, accessories, and their parts, whether dual use or military unique, are described separately from other FSCAP in paragraphs 9 through 11.

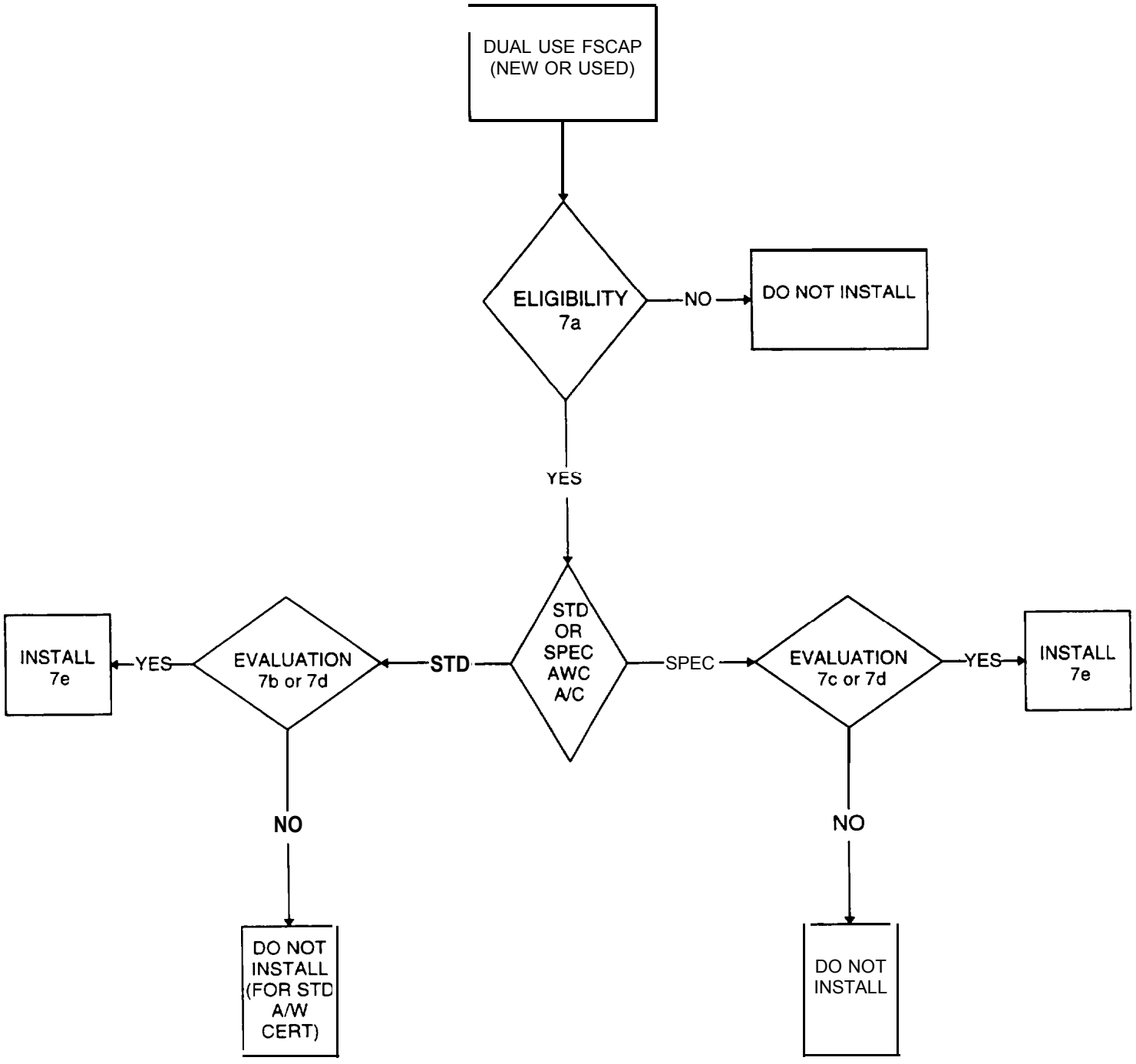
f. Military surplus FSCAP, whether new, used, or parted out, should not be presumed to be eligible for installation on FAA type-certificated products. As shown in Figure 1 and discussed in paragraphs 7 through 11, pertinent accompanying historical records/documentation are essential for the Defense Reutilization Marketing Office (DRMO) public sale of FSCAP, engines, and propellers, and subsequently for categorizing FSCAP, engines, or propellers as either dual use or military unique, to establish installation eligibility, and to evaluate for airworthiness in accordance with this AC. With appropriate documentation, the installer should be able to determine that the installation of that FSCAP will maintain the aircraft in compliance with the pertinent regulation(s) and in condition for safe operation.

FIGURE 1. MILITARY SURPLUS PROCESS



7. DUAL USE FSCAP. The process for eligibility screening and airworthiness evaluation of dual use FSCAP by individuals authorized under section 43.7 is illustrated in Figure 2 and described in paragraphs 7a through 7e. The authorized individual completing the eligibility screening and/or the airworthiness evaluation should make a record entry to document the result(s).

FIGURE 2. DUAL USE FSCAP (NEW OR USED)



a. Eligibility. New or used dual use FSCAP, as defined in paragraph 3c, may be considered eligible for installation on FAA type-certificated products based upon the requisite evaluation findings when accompanied by pertinent DoD historical records detailing the following information:

(1) part identification - part number, DoD National Stock Number and serial number;

(2) manufacturer, DoD CAGE code, and date of manufacture;

(3) total time-in-service;

(4) current status of life-limited parts;

(5) time since the last overhaul of each part which is required to be overhauled on a specified time basis;

(6) identification of current inspection status, including time since last required inspection or maintenance performed;

(7) current status of applicable airworthiness directives (AD) and DoD directives (i.e., engineering change, technical order, maintenance work order, etc.), including the date, method, and compliance requirement; if the AD involves recurring action, time and date when the next action is required;

(8) a list of current major alterations, repairs or modifications for each part;

(9) date any work was accomplished; and

(10) work authentication.

b. Evaluation of New Dual Use FSCAP for Installation on Products with Standard Airworthiness Certificates. In addition to verifying that the part is eligible for installation using pertinent items listed in paragraph 7a, the evaluation shall determine that the part conforms to its FAA-approved type design, and that the part is in condition for safe operation.

c. Evaluation of New Dual Use FSCAP for Installation on Products with Special Airworthiness Certificates. In addition to verifying that the part is eligible for installation by reviewing applicable records listed in paragraph 7a, the evaluation should ensure that the part is cited in the FAA-accepted maintenance manual and illustrated parts catalog (IPC) specified on the applicable aircraft type certificate data sheet (TCDS), and that the part is in condition for safe operation.

d. Evaluation of Used Dual Use FSCAP for Installation on Products with Standard or Special Airworthiness Certificates. In addition to successfully completing the eligibility screening by reviewing applicable records listed in paragraph 7a, plus those evaluation

procedures specified for new dual use FSCAP in either paragraph 7b (standard) or 7c (special), to establish used dual use FSCAP airworthiness in accordance with section 43.13, further evaluation should be performed by persons authorized under section 43.7 (a), (c), (d), or (e) using the following applicable methods, means or data sources:

(1) differences between military and civil version (possible DoD modification, alteration, repair, etc. performed);

(2) current manufacturer's or DoD technical data and procedures to perform tests and inspections including current life limited parts list;

(3) comparison of military time and/or cycle count for accumulated operational time versus civil (e.g., "Did the military use a different method than civil operators to account for accumulated operational time?");

(4) non-destructive tests, as required;

(5) bench testing or functional test, as required;

(6) results of tests and inspection recorded;

(7) complete historical and modification/alterations/repair records;

(8) manufacturer's identification plate;

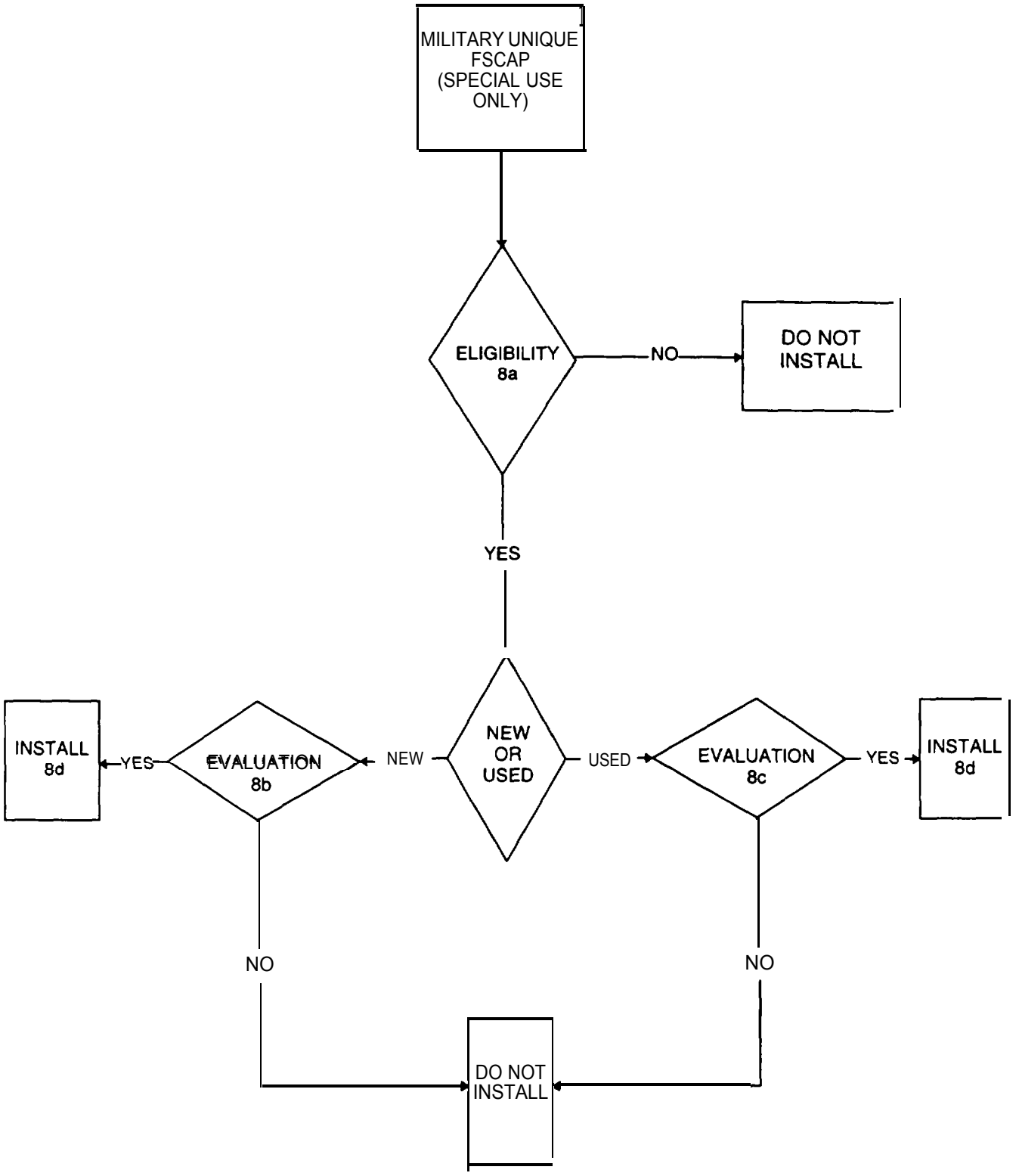
(9) flight, maintenance, and/or structural manual(s), and illustrated parts catalog; and

(10) instructions for continued airworthiness,

e. Approval for Installation of Dual Use FSCAP. Persons authorized under section 43.7 may approve for installation dual use FSCAP that have successfully completed airworthiness evaluation in accordance with paragraph 7b, 7c, or 7d. The installer must be able to determine that the installation of the FSCAP will leave the product in compliance with all regulations and in condition for safe operation.

8. MILITARY UNIQUE FSCAP. The process of eligibility screening and airworthiness evaluation of military unique FSCAP by individuals authorized under section 43.7 is illustrated in Figure 3 and described in paragraphs 8a through 8d. The authorized individual completing the eligibility screening and/or the airworthiness evaluation should make a record entry to document the result(s).

FIGURE 3. MILITARY UNIQUE FSCAP (SPECIAL USE ONLY)



a. Eligibility. Military unique FSCAP may be eligible for installation on civil products with special airworthiness certificates under either subsection 21.305(c) in conjunction with type certification procedures for a product, or in accordance with a TCDS. Military unique FSCAP is not eligible for installation on a civil product with a standard airworthiness certificate. At a minimum, the accompanying historical records for military unique FSCAP should contain the following pertinent information:

(1) part identification - part number, DoD National Stock Number and serial number;

(2) manufacturer, DoD CAGE code, and date of manufacture;

(3) total time-in-service;

(4) current status of life-limited parts;

(5) time since the last overhaul of each part which is required to be overhauled on a specified time basis;

(6) identification of current inspection status, including time since last required inspection or maintenance performed;

(7) current status of applicable ADs and DoD directives, (i.e., engineering change, technical order, maintenance work order, etc.) including the date, method, and compliance requirement; if the AD involves recurring action, time, and date when the next action is required;

(8) a list of current major alterations, repairs, or modifications for each part;

(9) date any work was accomplished; and

(IO) work authentication.

b. Evaluation of New Military Unique FSCAP for Installation on Products with Special Airworthiness Certificates. In addition to verifying that the part is eligible for installation by reviewing applicable records listed in paragraph 8a, the evaluation should ensure that the part is cited in the FAA-accepted, military-approved maintenance manual and IPC specified on the applicable aircraft TCDS, and that the part is in condition for safe operation.

c. Evaluation of Used Military Unique FSCAP for Installation on Products with Special Airworthiness Certificates. In addition to verifying that the part is eligible for installation by reviewing applicable records listed in paragraph 8a, the evaluation should ensure that the part is cited in the FAA-accepted, military-approved maintenance manual and IPC specified on the applicable aircraft TCDS, and that the part is in condition for safe operation. To establish the airworthiness of used military unique FSCAP in accordance with section 43.13, further evaluation should be performed using the following applicable methods, means, or data sources:

(1) special equipment or test apparatus, as required;

(2) current manufacturer's or DoD technical data and procedures to perform tests and inspections;

(3) comparison of military time and/or cycle count for accumulated operational time versus civil (e.g., "Did the military use a different method than civil operators to account for accumulated operational time?");

(4) non-destructive tests, as required;

(5) bench testing or functional test, as required;

(6) results of tests and inspection recorded;

(7) complete historical and modification/alterations/repair records;

(8) manufacturer's identification plate;

(9) flight, maintenance, and/or structural manual(s), and illustrated parts catalog; and

(10) instructions for continued airworthiness.

d. Approval for Installation of Military Unique FSCAP. Persons authorized under section 43.7 may approve for installation military unique FSCAP that have successfully completed airworthiness evaluation in accordance with paragraph 8b or 8c. The installer must be able to determine that the installation of the FSCAP will leave the product in compliance with the TCDS, and in condition for safe operation.

9. MILITARY SURPLUS ENGINES, PROPELLERS, ACCESSORIES, AND THEIR PARTS.

a. Military surplus engines, propellers, accessories, and their parts, whether new, used, or parted out, should not be presumed to be eligible for installation on FAA type-certificated aircraft. The pertinent accompanying historical records documentation is essential for the DRMO public sale of engines, propellers, accessories, and their parts, for subsequently categorizing them as either dual use or military unique, and for establishing their eligibility and airworthiness in accordance with either paragraph 10 or 11.

b. Military engines and propellers may be type-certificated under 14 CFR, section 21.17, which requires issuance of a new TC and compliance with the applicable requirements, such as part 33 for engines and part 35 for propellers. For a military aircraft issued a TC under section 2 1.25 or 2 1.27, the applicable engine or propeller is not required to be issued a separate TC .

However, it should be noted that the engine and propeller cannot be certificated separately under these two sections. Any eligible military surplus engines or propellers will be referenced on the aircraft's TCDS.

c. Dual use military surplus engines and propellers which hold a TC, and their accessories and parts, may be eligible for installation on civil aircraft, engines, or propellers, respectively, in accordance with the applicable regulations. However, military unique engines, propellers, accessories, or their military unique parts, may be eligible for installation only on civil military surplus aircraft with special airworthiness certificates.

d. Engines, propellers, accessories, or their parts are deemed flight safety critical if their failure, malfunction or absence could cause a catastrophic failure resulting in loss or serious damage to the aircraft or an uncommanded engine shutdown resulting in an unsafe condition. Such conditions include. but are not limited to:

(1) release of engine or propeller debris, or propeller separation; and

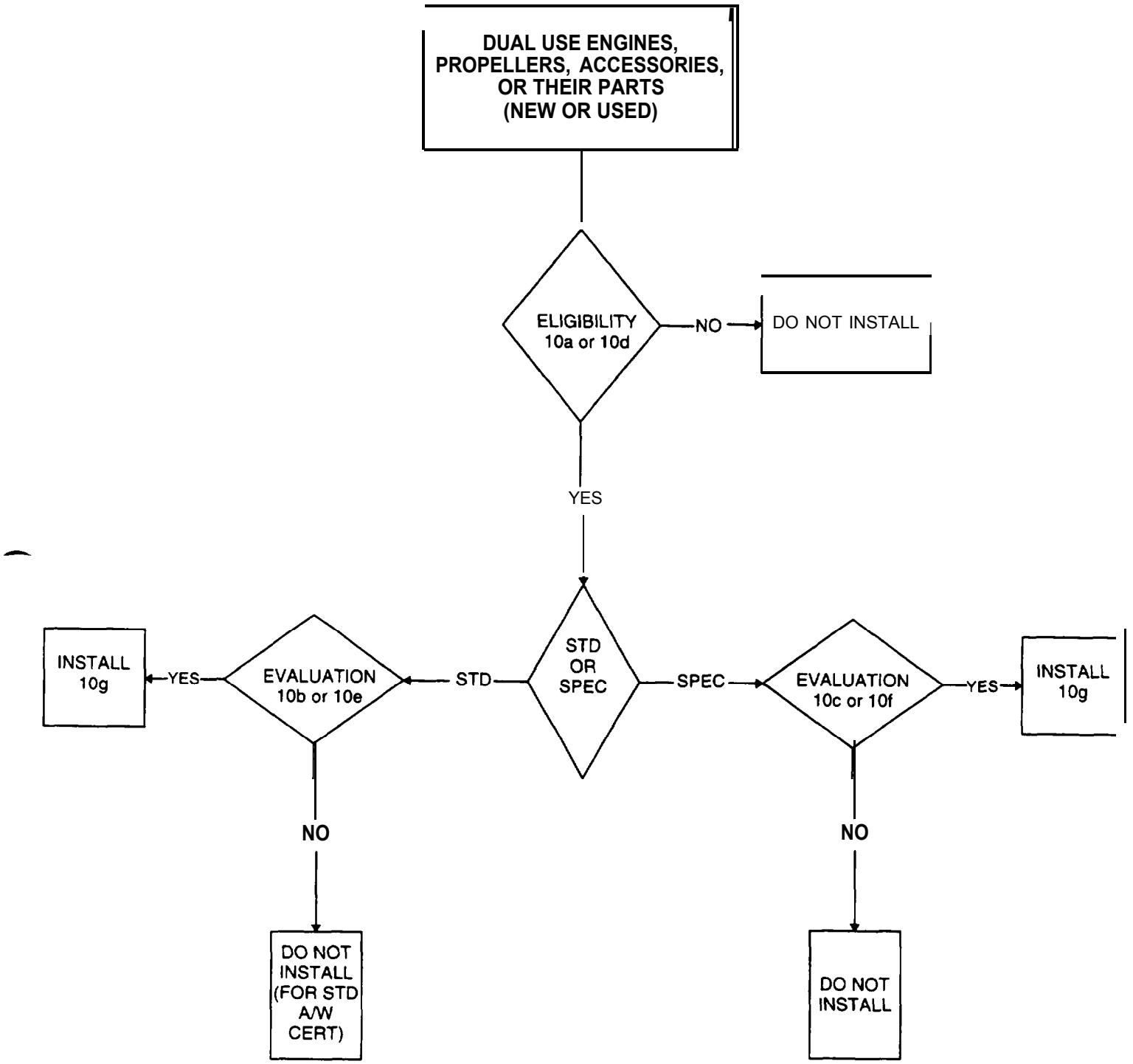
(2) in rotorcraft, a transient or continuous power loss, or loss of power response.

e. Examples of flight safety critical engine and propeller parts are life-limited parts, rotating parts, and for rotorcraft, actuating parts.

10. DUAL USE MILITARY SURPLUS ENGINES, PROPELLERS, ACCESSORIES, AND THEIR PARTS. The process of eligibility screening and airworthiness evaluation of dual use military surplus engines, propellers, accessories, or their parts, by individuals authorized under section 43.7, or other airworthiness evaluation by individuals specified, is shown in Figure 4 and described in paragraphs 10a through 10g. The authorized individual completing the eligibility screening and/or the airworthiness evaluation should make a record entry to document the result(s).

a. Eligibility of New Dual Use Engines, Propellers, Accessories, or Their Parts for Installation on Aircraft with Standard or Special Airworthiness Certification. A U.S. TC must have been issued for a corresponding civil model engine or propeller under section 2 1.2 1 at the time of manufacture (standard or special), or a U.S. aircraft TC must have been issued and the engines or propellers referenced in the aircraft TCDS under section 2 1.27 (standard) or section 2 1.25 (special), New dual use engines, propellers, accessories, or their parts, as defined in paragraph 3c may be considered eligible for installation on FAA type-certificated surplus military aircraft or civil aircraft with standard airworthiness certification or special airworthiness certification, based upon the requisite favorable findings from reviewing pertinent historical records detailing the following applicable information:

FIGURE 4. DUAL USE ENGINES, PROPELLERS, ACCESSORIES, OR THEIR PARTS (NEW OR USED)



(1) engine, propeller, accessories, and part identification - assembly part number and serial number and manufacturer;

(2) contract or purchase order number manufactured under;

(3) evidence of engine, propeller, accessory, and part status (i.e., serviceable or unserviceable, per DD Form 1574- 1 or DD Form 2410);

(4) complete historical records maintained by the military, the manufacturer, and any other prior owner(s), pertaining to inspection, modification, repair, alteration, maintenance, and operation of the engine from the time of acceptance by the military, including, but not limited to, DD Form 2408-5 and DD Form 2408- 16. The maintenance records should also include the date that the work was accomplished, and work authentication; and

(5) current status of applicable ADs and DoD directives (i.e., engineering change, technical order, maintenance work order, etc.), including the date, method, and compliance requirement; if the AD involves recurring action, time and date when the next action is required.

b. Evaluation of New Dual Use Engines, Propellers, Accessories, or Their Parts for Aircraft with Standard Airworthiness Certification. After reviewing the applicable items listed in paragraph 10a and establishing that the product/part is eligible for installation on an FAA type-certificated civil aircraft, the evaluation should ensure that each engine, propeller, accessory and associated part conforms to the approved TC, was manufactured under an FAA-approved production system, and is in condition for safe operation.

c. Evaluation of New Dual Use Engines, Propellers, Accessories, or Their Parts for Aircraft with Special Airworthiness Certification. After reviewing the applicable items listed in paragraph 10a of this AC to ensure that the engine, propeller, accessory or part is eligible, the evaluation should verify that the engine, propeller, accessory, or associated part is listed in the FAA-accepted, military-approved maintenance manual or FAA-accepted civil maintenance manual and IPC specified on the TCDS, and that the product/part is in condition for safe operation.

d. Eligibility of Used Dual Use Engines, Propellers, Accessories, or Their Parts for Aircraft with Standard or **Special Airworthiness Certification.** A U.S. TC must have been issued for a corresponding civil model engine or propeller under section 21.21 at the time of manufacture (standard or special), or a U.S. aircraft TC must have been issued and the engine or propeller referenced in the aircraft TCDS under section 21.27 (standard) or section 21.25 (special). The used engines, propellers, accessories, or parts may be considered eligible for installation on FAA type-certificated civil or surplus military aircraft with standard or special airworthiness certification when accompanied by pertinent historical records in accordance with the items listed in paragraph 10a.

e. Evaluation of Used Dual Use Engines, Propellers, Accessories, or Their Parts for Aircraft with Standard Airworthiness Certification. After establishing eligibility by reviewing the applicable items listed in paragraph 10a, the evaluation should be performed by an

FAA Engineer or an appropriately authorized designated engineering representative (DER). When a DER is used, ensure that the DER substantiates recommendations or decisions in writing using FAA Form 8 11 O-3, Statement of Compliance, including supporting document(s). The evaluation should ensure that each engine, propeller, accessory, and associated part conforms to the approved TC, was manufactured under an FAA-approved production system, and is in condition for safe operation. In addition, the following should be evaluated:

(1) Operational differences between military and civil versions (e.g., possible DoD modification, alteration, repair, etc. performed), in performance standards as listed in the TCDS. (e.g., thrust, shaft horsepower, RPM and ratings), and in specifications, as listed in the TCDS and the maintenance manuals (e.g., fuel type, oil, weight);

(2) Complete historical operational records, i.e., extreme operational conditions such as accidents, fires or engine operating limit exceedances;

(3) Complete historical maintenance records, i.e., modifications, alterations, and repairs, and complete documentation of work performed by an FAA approved facility that was properly rated for the work performed and which conformed to the FAA approved data;

(4) Instructions for Continued Airworthiness;

(5) Emission requirements as stated in the TCDS (engine only);

(6) Comparison of military time and/or cycle count for accumulated operational time and cycle versus civil (e.g., "Did the military use a different method than civil operators to account for accumulated operational time and what are the expended equivalent civil cycles of the parts, taking into account their past operational history and mission profile?');

(7) Current manufacturer's technical data to perform tests or inspections;

(8) Written results of inspections performed (e.g., maintenance record entry, FAA Form 8 130-3, Airworthiness Approval Tag, or FAA Form 337, Repair/Alteration Data Form, for approval for return to service) and a completed FAA Form 8 130-9, Statement of Conformity, signed by the person who approved the item for return to service, as applicable;

(9) The application of the identifying marking requirements per sections 45.11 and 45.13, as applicable;

(10) Engine, propeller, accessory, or part overhaul records, including overhaul in accordance with civil engine/propeller manuals (e.g., "Is the engine, propeller, accessory or part in a newly overhauled condition?'); and

(I l) Verification that engine, propeller, accessory, or part was produced by an FAA PAH.

f. Evaluation of Used Dual Use Engines, Propellers, Accessories, or Their Parts for Aircraft with Special Airworthiness Certification. After eligibility is established, the evaluation should be performed by an FAA Engineer or an appropriately authorized DER. When a DER is used, ensure

that the DER substantiates recommendations or decisions in writing using FAA Form 8 110-3, Statement of Compliance, including supporting document(s). The evaluation should verify that the engine, propeller, accessory, or associated part is listed in the FAA-accepted, military-approved maintenance manual or FAA-accepted maintenance manual and IPC specified on the TCDS, and that the product/part is in condition for safe operation. In addition, the following should be evaluated:

(1) Complete historical operational records, i.e., extreme operational conditions such as accidents, fires, or engine operating limit exceedances;

(2) Complete historical maintenance records, i.e., modifications, alterations, **and** repairs, and complete documentation of the work performed;

(3) Instructions for Continued Airworthiness;

(4) Emission requirements as stated in the TCDS (engine only);

(5) Comparison of military time and/or cycle count for accumulated operational time **and** cycle versus civil (e.g., "Did the military use a different method than civil operators to account for accumulated operational time and what are the expended equivalent civil cycles of the parts, taking into account their past operational history and mission profile?");

(6) Current manufacturer's technical data to perform tests or inspections;

(7) Written results of inspections performed (e.g., maintenance record entry, FAA Form 8 130-3 or FAA Form 337 for "Return-to-Service") and a completed FAA Form 8 130-9, signed by the person who approved the "Return-to-Service", as applicable;

(8) The application of the identifying marking requirements per sections 45.11 and 45.13, as applicable;

(9) Engine, propeller, accessory, or part overhaul records, including overhaul **in** accordance with civil engine/propeller manuals (e.g., "Is the engine, propeller, accessory or part in a newly overhauled condition?'); and

(10) Verification that engine, propeller, accessory, or part was produced by an FAA PAH.

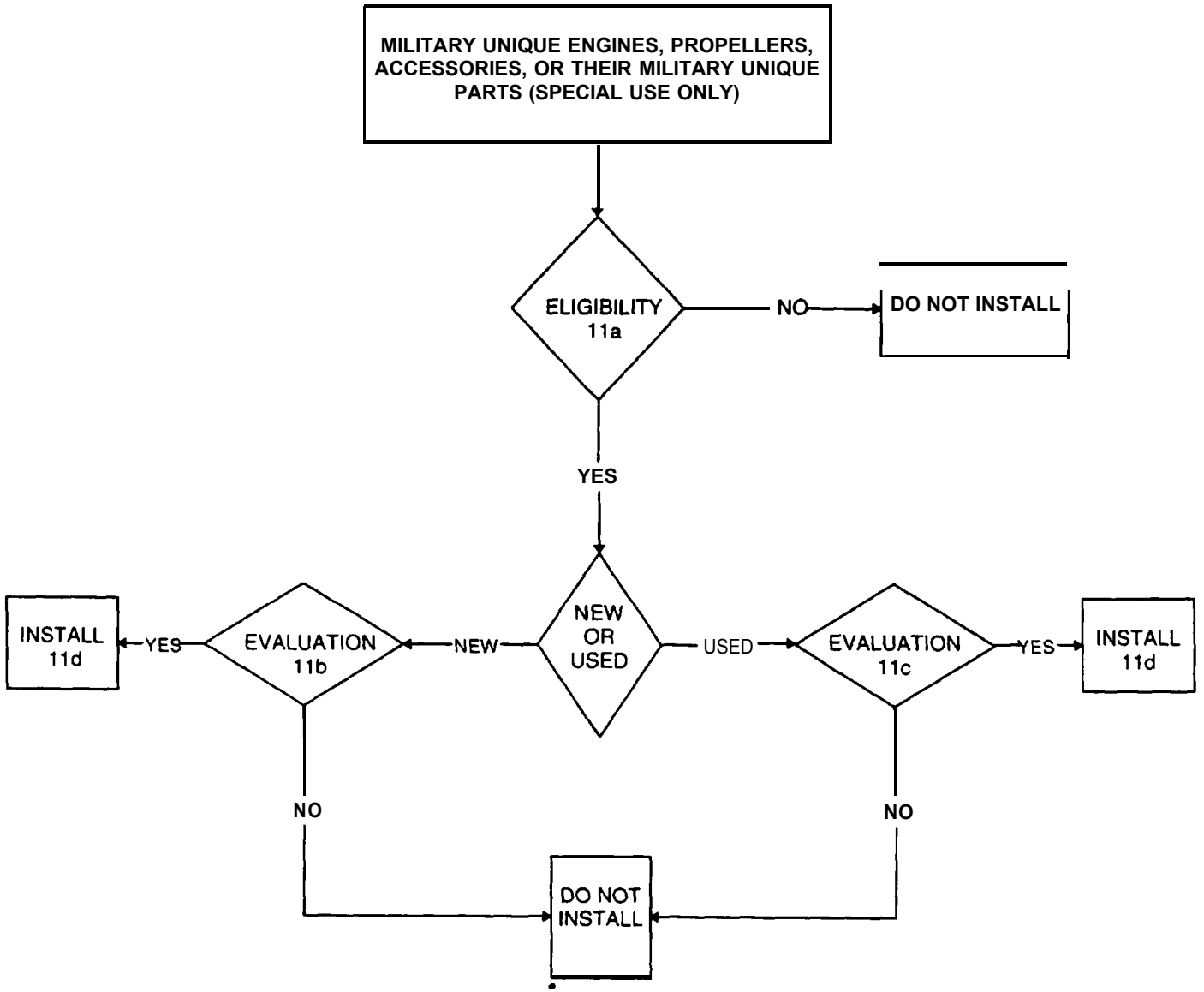
g. Approval for Installation of Dual Use Engines, Propellers, Accessories, and Parts. Persons authorized under section 43.7 may approve for installation dual use engines, propellers, accessories, or parts that have successfully completed airworthiness evaluation in accordance with paragraph 10b, 10c, 10e, or 10f. The installer must be able to determine that the use of the engine or propeller, and/or the installation of the accessory or part, will leave the aircraft in compliance with pertinent regulations and in condition for safe operation.

11. MILITARY UNIQUE ENGINES, PROPELLERS, **ACCESSORIES, AND** THEIR MILITARY UNIQUE PARTS. Military unique engines, propellers, accessories, and parts are FSCAP that were specifically and uniquely designed and manufactured for the U.S. military for which there was originally no corresponding FAA-approved PAH engine, propeller, accessory or

part for civil application. The process of eligibility screening and airworthiness evaluation of military unique engines and propellers by individuals authorized under section 43.7, or other airworthiness evaluation by individuals specified, is shown in Figure 5 and described in paragraphs 11 a through d. The authorized individual completing the eligibility screening and/or the airworthiness evaluation should make a record entry to document the result(s).

a. Eligibility. Military unique engines, propellers, accessories, and parts may be eligible for installation on surplus U.S. military aircraft with special airworthiness type certification under subsection 2 1.25(a) and 2 1.305(c). The accompanying historical records for military unique engines, propellers, accessories, or parts should contain the pertinent information in accordance with the items listed in paragraph 10a.

FIGURE 5. MILITARY UNIQUE ENGINES, PROPELLERS, ACCESSORIES, OR THEIR MILITARY UNIQUE PARTS (SPECIAL USE ONLY)

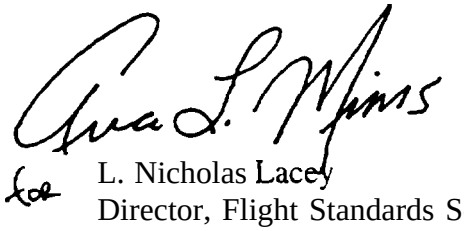


b. Evaluation of New Military Unique Engines, Propellers, Accessories, and Their Parts for Installation on Surplus Military Aircraft with Special Airworthiness Certification. After reviewing applicable records listed in paragraph 10a of this AC to ensure that the engine, propeller, accessory, or part is eligible, the evaluation should verify that the engine, propeller, accessory, or associated part is listed in the FAA-accepted, military-approved maintenance manual or FAA-accepted civil maintenance manual and IPC specified on the TCDS, and ensure that the engine, propeller, accessory, or part is in condition for safe operation.

c. Evaluation of Used Military Unique Engines, Propellers, Accessories, and Their Parts for Installation on Surplus Military Aircraft with Special Airworthiness Certification. After the applicable records listed in paragraph 10a are reviewed to ensure that the engine, propeller, accessory, or part is eligible, the evaluation should be performed by an FAA Engineer or an appropriately authorized DER. When a DER is used, ensure that the DER substantiates recommendations or decisions in writing using FAA Form 8110-3, including supporting document(s). The evaluation should verify that the engine, propeller, accessory, or associated part is listed in the FAA-accepted, military-approved maintenance manual or FAA-accepted civil maintenance manual and the IPC specified on the TCDS, and ensure that the product/part is in condition for safe operation.

d. Approval for Installation of Military Unique Engines, Propellers, Accessories, and Parts. Persons authorized under section 43.7 may approve for installation military unique engines, propellers, accessories, or parts that have successfully completed airworthiness evaluation in accordance with paragraph 1 lb or 1 lc. The installer must be able to determine that the use of the engine or propeller, and/or the installation of the accessory or part, will leave the product in compliance with the TCDS and in condition for safe operation.

12. SUMMARY. To ensure continued safety in civil aviation, it is essential that appropriate data is used when determining the eligibility for installation on an FAA type-certificated aircraft of all U.S. military surplus FSCAP, engines, and propellers. The airworthiness evaluation should be performed by an authorized person reviewing the applicable records and performing appropriate tests and inspections as specified, and shall ensure that each FSCAP, engine or propeller conforms to its approved type design and is in condition for safe operation.



for L. Nicholas Lacey
Director, Flight Standards Service